PPL13 PROJECT NOMINEE FACT SHEET
March 11, 2003

Project Name and Number: Whiskey Island Back Barrier Fill

Coast 2050 Strategies: #12- Restore and Maintain the Isles Dernieres and Timbalier Barrier Island Chains.

Project Location: Region 3, Terrebonne Basin, Terrebonne Parish, south of Pelto Marshes, Isles Dernieres Barrier Islands, Whiskey Island.

Problem: The Isles Dernieres are one of the most rapidly deteriorating barrier shorelines in the United States. This barrier island chain serves as a storm buffer for inland bays, estuaries and wetlands, provides important habitat for one of the world's most productive fisheries, and protects human populations as well as oil and gas infrastructure. Area change rates for Whiskey Island 1978-1988 were documented at a loss of 31.1 acres per year.

Goals
1) Dredge and import sediment into the Louisiana coastal ecosystem to widen marsh platform on the central and eastern portions of Whiskey Island.
2) Enhance function of Whiskey Island as a protective barrier for back bay and inland areas.
3) Provide unique and sustainable barrier island habitat for numerous biological species, including endangered species, in areas that are presently open water.

Proposed Solution: Construct back barrier marsh behind Whiskey Island beach front constructed by previous CWPPRA projects. Construction of these back barrier marshes will widen island sections promoting the long term sustainability of these sections of the island. Approximately 360 acres of back barrier intertidal marsh, built to an elevation of 0'- 2' NAVD 88 will be created. There will be an optional construction area of approximately 180 acres to the east, behind the section of Whiskey Island that directly faces Whiskey Pass. Restored areas would be planted with appropriate barrier island vegetation.

Preliminary Project Benefits: The project would potentially create up to 540 acres of additional back barrier marsh habitat. Cuts and breaches would be prevented which would help to reduce sediment loss from the barrier island system into deeper Gulf or bay waters. Attenuation of wave heights would occur in back bays, resulting in reduction of inland marsh loss. Another benefit is the addition of sediment into the littoral transport system of coastal Louisiana.

Compatibility with Coast 2050 Criteria

<u>Wetland Elevation/Sustainability</u>
The restoration of barrier habitat from open water to emergent marsh constitutes vertical accretion. Further vertical accumulation of wetland soil will be accomplished by use of vegetative plantings that will help hold/trap sediment and produce above ground biomass. The constructed width will contribute to the stability of overwash sediments ensuring that more will be held on the marsh platform rather than lost into open water.

<u>Ecosystem Influence Area</u>
In addition to directly creating 540 acres of emergent habitat, the project would benefit the islands, bays, fringe and inland marshes north of the creation area.

Structural Framework
The Isles Dernieres provide the gulfward boundary of the Terrebonne Estuary. The strengthening of Whiskey Island will help contribute to a more sustainable barrier system over the life of the project.

Infrastructure
The project should have a net positive impact on non-critical coastal infrastructure.

Organism and Material Linkages
The project, which will be built at an intertidal elevation, will allow a natural level of exchange of organisms and materials consistent with the sustainability of the ecosystem.

Coast 2050 Habitat Objectives
The habitat objectives for this area of Region 3 are to maintain barrier island/cheniere shorelines. This project will serve to help maintain this type of habitat.

Project Synergy
The proposed project is compatible with the constructed Whiskey Island (TE-27) project, as well as with the Whiskey Island West Flank project, all of which will contribute towards the sustainability of this island

Preliminary Construction Costs: $17,137,000

Preparer of Fact Sheet
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